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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,670	09/30/2004	Yi-Bing Lee	12847-US-PA	5669

31561 7590 05/19/2008  
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE  
7 FLOOR-1, NO. 100  
ROOSEVELT ROAD, SECTION 2  
TAIPEI, 100  
TAIWAN

EXAMINER
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LEE, PING

ART UNIT	PAPER NUMBER
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2615

NOTIFICATION DATE	DELIVERY MODE
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05/19/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USA@JCIPGROUP.COM.TW

<b>Office Action Summary</b>	<b>Application No.</b> 10/711,670	<b>Applicant(s)</b> LEE ET AL.	
	<b>Examiner</b> Ping Lee	<b>Art Unit</b> 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8 and 10-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8 and 10-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

On lines 2-3 of claim 1, the phrase states that "within each microphone port". This implies that within each microphone port, there are two microphone modules and a mixer circuit. However, the specification and drawing as originally filed fail to clearly support this limitation.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1, 2, 5-8 and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rittmueller et al (US006016346A) (hereafter Rittmueller) in view of Baumhauer, Jr. et al (US005121426A) (hereafter Baumhauer).

Regarding claims 1, 2, 5-8 and 11-17 Rittmueller discloses a communication device for a teleconference system (col. 1, lines 8-9) comprising a loudspeaker facing a direction that is opposite to the direction facing by a microphone. Although not clearly shown, a communication network and a control unit are inherently included to provide communication between called and call parties through telephone line. Rittmueller fails to show an input module.

Rittmueller suggests that an omni-directional microphone or a unidirectional microphone could be used (col. 5, lines 38-40). Baumhauer teaches the advantages of using pressure gradient microphone as the input module for a teleconference system. As shown in Fig. 10, the module has multiple microphone ports. As shown in Fig. 6, a first microphone module (200-1) and a second microphone module (200-2) wherein the second microphone module has a fixed gain (there is not gain modification for the signal from 200-2 to 230) and the second microphone module shifts (by 220) a phase of the near-end audio signal to produce a second audio signal with a phase difference relative to the near-end audio signal; and a mixer circuit (230) for receiving the first audio signal and the second audio signal and subtracting the second audio signal from the first audio signal to produce a third audio signal. By utilizing the input module, the ambient noise and reverberation occurred within a room would be greatly reduced. Thus, it would have been obvious to one of ordinary skill in the art to modify Rittmueller by incorporating the input module as taught in Baumhauer in order to improve the speech reception and reduce the interference.

5. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rittmueller and Baumhauer as applied to claims 1 and 8 above, and further in view of Miller, II (US 5,029,215) (hereafter Miller).

Regarding claims 4 and 10, Baumhauer fails to show a gain modulation circuit. Baumhauer teaches the basic second-order pressure gradient microphone system without providing the detail circuitry coupled to each microphone. Miller teaches the specific of having a pre-amplifier coupled to each microphone. See. Fig. 3. Thus, it would have been obvious to one of ordinary skill in the art to further modify Rittmueller and Baumhauer by having pre-amplifier coupled to the microphones as taught by Miller in order to amplify the microphone signal to proper signal level.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1, 8 and 14 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 571-272-7522.

The examiner can normally be reached on Monday, Wednesday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ping Lee/  
Primary Examiner, Art Unit 2615

pwl